Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A level control system for controlling the thickness of a work material in a slurry form, said level control system comprising in combination:

a. a moving belt ~~system~~;

b. a fluid reservoir for dispensing slurry onto the moving belt, the moving belt forming at least a portion of the floor of the fluid reservoir;

c. a control valve for filling the fluid reservoir with slurry at a controlled rate;

d. a blade positioned above the moving belt for regulating the thickness of the slurry that passes beyond said blade;

e. a lens disposed near the moving belt ~~between~~ above said fluid reservoir ~~and said blade~~ for receiving light reflected from the upper surface of the slurry within the fluid reservoir before the slurry passes beyond said blade, and for detecting the height of the slurry within the fluid reservoir;

f. a light sensor disposed relatively remote from the slurry, said light sensor generating electrical signals in response to light received thereby;

g. a fiber optic cable extending between the lens and the light sensor for coupling light received by said lens to said light sensor; and

h. a control circuit coupled to said light sensor and responsive to said electrical signals for generating a control signal, said control circuit being coupled to said control valve for providing said control signal to regulate the flow of slurry through said control valve.

2. (original) The level control system recited by claim 1 wherein said control valve is responsive to pneumatic pressure, and wherein said control circuit provides said control signal in the form of a regulated pneumatic pressure to said control valve.

3. (original) The level control system recited by claim 2 wherein said regulated pneumatic pressure is substantially inversely proportional to the rate of flow of slurry through said control valve.

4. (currently amended) ~~The level control system recited by claim 2~~ A level control system for controlling the thickness of a work material in a slurry form, said level control system comprising in combination:

a. a moving belt system;

b. a fluid reservoir for dispensing slurry onto the moving belt;

c. a control valve for filling the fluid reservoir with slurry at a controlled rate, and wherein said control valve is responsive to pneumatic pressure;

d. a blade positioned above the moving belt for regulating the thickness of the slurry that passes beyond said blade;

e. a lens disposed near the moving belt between said fluid reservoir and said blade for receiving light reflected from the upper surface of the slurry;

f. a light sensor disposed relatively remote from the slurry, said light sensor generating electrical signals in response to light received thereby;

g. a fiber optic cable extending between the lens and the light sensor for coupling light received by said lens to said light sensor; and

h. a control circuit coupled to said light sensor and responsive to said electrical signals for generating a control signal, said control circuit being coupled to said control valve for providing said control signal to regulate the flow of slurry through said control valve, wherein said control circuit provides said control signal in the form of a regulated pneumatic pressure to said control valve, and wherein said control circuit includes a pressure regulator responsive to said electrical signals for generating said control signal.

5. (new) A level control system for controlling the thickness of a work material in a slurry form, said level control system comprising in combination:

a. a moving belt;

b. a fluid reservoir for dispensing slurry onto the moving belt;

c. a control valve for filling the fluid reservoir with slurry at a controlled rate;

d. a blade positioned above the moving belt for regulating the thickness of the slurry that passes beyond said blade;

e. a lens disposed near the moving belt above said fluid reservoir for receiving light reflected from the upper surface of the slurry within the fluid reservoir before the slurry passes beyond said blade, and for detecting the height of the slurry within the fluid reservoir;

f. a light sensor disposed relatively remote from the slurry, said light sensor generating electrical signals in response to light received thereby;

g. a fiber optic cable extending between the lens and the light sensor for coupling light received by said lens to said light sensor; and

h. a control circuit coupled to said light sensor and responsive to said electrical signals for generating a control signal, said control circuit being coupled to said control valve for providing said control signal to regulate the flow of slurry through said control valve.